

Copper Chief Mine Access Road Right-of-Way (AZA 32719)

Dear Interested Party:

Please be advised that an Environmental Assessment (EA) was prepared (EA-AZ-320-2005-032) for the proposed Copper Chief Mine access road right-of-way. This EA is a public document, and it is available for your review and comment. The proposed action analyzed in the EA would include portions of the following described public lands:

Gila & Salt River Meridian, La Paz County, Arizona

- T. 4 N., R. 19 W.,
 - sec. 5, lot 4, $W\frac{1}{2}NW\frac{1}{4}$, and $SW\frac{1}{4}$;
 - sec. 6, lot 1 and $NE\frac{1}{4}NE\frac{1}{4}$;
 - sec. 8, $E\frac{1}{2}$ and $NE\frac{1}{4}NW\frac{1}{4}$;
 - sec. 9, $S\frac{1}{2}$.
- T. 5 N., R. 19 W.,
 - sec. 30, lot 4 and $SW\frac{1}{4}$;
 - sec. 31, lot 1 and $NE\frac{1}{4}$;
 - sec. 32, $NW\frac{1}{4}$, $NE\frac{1}{4}SW\frac{1}{4}$, and $W\frac{1}{2}SE\frac{1}{4}$.
- T. 5 N., R. 20 W.,
 - sec. 25, $SW\frac{1}{4}NE\frac{1}{4}$, $N\frac{1}{2}SW\frac{1}{4}$, and $SE\frac{1}{4}$;
 - sec. 26, $S\frac{1}{2}SE\frac{1}{4}$ and $SE\frac{1}{4}SW\frac{1}{4}$;
 - sec. 34, $NE\frac{1}{4}$;
 - sec. 35, $N\frac{1}{2}NW\frac{1}{4}$.

The area described contains approximately 41.21 acres.

The intent of this EA is to analyze site specific environmental effects of a road right-of-way grant to Sunset Marble LLC (Sunset) to be used for commercial purposes to access their mine site. The no action alternative would not authorize the proposed road.

Therefore, Sunset would not have legal access to their mine site.

The proposed action would be in conformance with the Yuma District Resource Management Plan (RMP), as amended, February 1987. Copies of the EA are available upon request from, and written comments may be submitted to: *Francisca S. Rodriguez, 2555 E. Gila Ridge Road, Yuma, AZ 85365, (928) 317-3237.*

This EA has also been posted on the Arizona State Office's web home page http://www.az.blm.gov/env_docs/proj_list.htm. The deadline for receipt of comments is August 31st. Public comments are welcome and encouraged. By law, the names and addresses of those commenting are available for public review during regular business hours. However, individual commentors may request that their name and/or address be withheld from the record. These requests will be honored to the extent allowable by law.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Yuma Field Office
2555 East Gila Ridge Road
Yuma, AZ 85365
www.az.blm.gov



FINDING OF NO SIGNIFICANT IMPACT

For

EA No. AZ-320-2005-032

The Bureau of Land Management (BLM), Yuma Field Office, has analyzed a proposal for an access road, commonly known as Boyer Gap Road, under the authority of Title V of the Federal Land Policy and Management Act, as amended. The road would provide Sunset Marble, LLC (Sunset) legal access to their mining operation. The road would be 40 feet wide with a 24-foot-wide roadbed and approximately 44,880 feet long. This proposal (Alternative A), as well as Alternative B, and the No Action Alternative (Alternative C), are described within the attached Environmental Assessment (EA) No. AZ-320-2005-032.

The EA is tiered to and in conformance with the *Yuma District Resource Management Plan*, as amended and its *Record of Decision* (BLM, May 1986 & February 1987) and the *La Posa Recreation Plan*. Any of the above referenced documents may be viewed at the Yuma Field Office during normal business hours.

The proposed action would assure that no significant adverse impacts would occur to the human environment in the following areas: Air Quality, Areas of Critical Environmental Concern, Cultural Resources, Environmental Justice, Farm Lands (Prime or Unique), Floodplain, Hazardous or Solid Waste, Native American Religious Concerns, Non-Native Invasive Species, Threatened or Endangered Species, Water Quality (Ground or Surface), Wetlands/Riparian Zones, Wild and Scenic Rivers, or Wilderness.

The proposed action does not significantly affect energy supply, distribution, and/or use and therefore a Statement of Adverse Energy Impact is not required.

On the basis of the information contained in the EA, and all other information available to me as is summarized above, it is my determination that the Proposed Action does not constitute a major Federal Action affecting the quality of the human environment. Therefore, an Environmental Impact Statement is unnecessary and will not be prepared.

Rebecca Heick
Yuma Field Manager

Date

If you wish your name and/or address withheld, you must state this prominently at the beginning of your comment letter. All comments from organizations or businesses will be available for public inspection in their entirety.

Sincerely,
Rebecca Heick
Field Manager

**ENVIRONMENTAL ASSESSMENT
NO. AZ-320-2005-032**

**COPPER CHIEF MINE ACCESS ROAD
RIGHT-OF-WAY (AZA 32719)**

**NORTHWEST OF QUARTZSITE,
BUREAU OF LAND MANAGEMENT, LA PAZ COUNTY, ARIZONA.**

prepared by

NORTHLAND RESEARCH, INC.
528 W. Aspen Avenue
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requested by

SUNSET MARBLE COMPANY, LLC
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prepared for

BUREAU OF LAND MANAGEMENT
YUMA FIELD OFFICE
2555 E. Gila Ridge Road
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JULY, 2005

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1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 Introduction

On March 5, 2004, Sunset Marble Company, LLC (Sunset) filed a right-of-way application for a road, under the authority of Title V of the Federal Land Policy and Management Act (FLPMA), as amended, with the Bureau of Land Management (BLM), Yuma Field Office to obtain legal access to use the road for commercial purposes across the following public lands:

Gila & Salt River Meridian, La Paz County, Arizona

T. 4 N., R. 19 W.,
sec. 5, lot 4, W $\frac{1}{2}$ NW $\frac{1}{4}$, and SW $\frac{1}{4}$;
sec. 6, lot 1 and NE $\frac{1}{4}$ NE $\frac{1}{4}$;
sec. 8, E $\frac{1}{2}$ and NE $\frac{1}{4}$ NW $\frac{1}{4}$;
sec. 9, S $\frac{1}{2}$..

T. 5 N., R. 19 W.,
sec. 30, lot 4 and SW $\frac{1}{4}$;
sec. 31, lot 1 and NE $\frac{1}{4}$;
sec. 32, NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, and W $\frac{1}{2}$ SE $\frac{1}{4}$.

T. 5 N., R. 20 W.,
sec. 25, SW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, and SE $\frac{1}{4}$;
sec. 26, S $\frac{1}{2}$ SE $\frac{1}{4}$ and SE $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 34, NE $\frac{1}{4}$;
sec. 35, N $\frac{1}{2}$ NW $\frac{1}{4}$.

The area described contains approximately 41.21 acres.

The company would be using Boyer Gap Road to access private land located in Boyer Gap (Copper Chief Patented Claims #2 and #3, Mineral Survey #4019, Plomosa Mining District, Section 34, T. 5 N., R. 20 W., La Paz County, Arizona (G&SRM)). Sunset requests a right-of-way over the existing Boyer Gap Road leading from the Town of Quartzsite to the Copper Chief Mine, approximately 8.5 miles. To access the mine site, Sunset requests a right-of-way over the existing road leading from the Town of Quartzsite to the mine site. Sunset also requests realignment of the road north of the Town of Quartzsite at the existing La Paz County Transfer Station. The request is to cross Tyson Wash at the Transfer Station and proceed directly west to tie into the existing Boyer Gap Road. This would involve the construction of a new segment of road. From time to time, a mineral material pit has been operated in Tyson Wash at the proposed crossing, and a crushing pad and stockpile pad exist immediately west of Tyson Wash. New disturbance would be minimized by using this route and would require approximately one-third (1/3rd) of a mile of new disturbance.

This environmental assessment (EA) addresses the impacts of a 66-foot-wide right-of-way because the La Paz County may submit an application for the Boyer Gap Road in the future. However, the proposed right-of-way would only be 40 feet wide with a 24-foot-wide roadbed. Sunset requests a roadway 24 feet wide to allow large trucks to pass. Expected life of the project is 20+ years. The project would operate year-round.

The private lands would be used as a quarry to produce decorative landscape rock, and other commercial purposes. The mineral to be taken from the quarry is marble. Expected tonnage to be removed monthly is between 4,000 and 12,000 tons. Construction is expected to be completed within sixty (60) days. Temporary work areas are not expected to be needed.

1.2 Need for the Proposed Action

The purpose of the Proposed Action is to allow Sunset to improve and maintain approximately a 40-foot-wide by 44,880-foot-long dirt road, with one area of road modification, requiring new road construction. The area of road modification is to cross Tyson Wash north of the Town of Quartzite at the La Paz County Transfer Station, directly west across Tyson Wash to connect with the existing Boyer Gap Road. This modification is proposed to move heavy trucks off of town streets and away from residential areas.

1.3 Scope of this Environmental Analysis

This report characterizes the construction of the Proposed Action and evaluates the potential environmental consequences for the alternatives, including the proposed action.

1.4 Land Use Plan Conformance

This Environmental Assessment (EA) is tiered to the Yuma District Resource Management Plan (RMP) and Environmental Impact Statement (EIS), as amended, February 1987. The RMP states that lands cases will continue to be evaluated on a case-by-case basis and in accordance with decisions established in the RMP (BLM 1992, page 8).

1.5 Related EISs, EAs, and other Relevant Documents

This Environmental Assessment (EA) conforms to the La Posa Recreation Plan and Environmental Assessment.

1.6 Applicable Regulatory Requirements and Required Coordination

The Proposed Action and alternatives are consistent with all known federal, state and local laws and plans. The proposed action would be authorized in accordance with Title V of FLPMA, as amended, and the regulations found at 43 Code of Federal Regulations (CFR) § 2800.

1.7 Decision(s) That Must Be Made

Sunset's right-of-way application and this EA characterize three (3) alternatives for a road right-of-way. The Proposed Action is Alternative A which would grant Sunset right-of-way along approximately 8.5 miles of Boyer Gap Road. In addition, Alternative A would grant access from State Highway 95 (Hwy 95) at the La Paz County Transfer Station west across Tyson Wash, resulting in approximately one-third of a mile of new disturbance (see Appendix A). Alternative B addresses accessing the mine site from Highway 95 then crossing a private residential area using already established public access roads and then through public lands. Implementing Alternative B would impact the residential private area. Alternative C addresses a No Action scenario. Implementing the No Action alternative would result in Sunset not having legal access to the mine site.

2.0 DESCRIPTION OF ALTERNATIVES INCLUDING THE PROPOSED ACTION

2.1 Alternative A - Proposed Action

The proposed action of the Sunset is to obtain a 40-foot right-of-way to access private land located in Boyer Gap (Copper Chief Mine, Copper Chief Patented Claims #2 and #3, Mineral Survey #4019, Plomosa Mining District, located in section 34, T. 5 N., R. 20 W., G&SRM). Legal access is requested for the road, 40 feet wide by 44,880 feet long (8.5 miles long), to conduct commercial activities for the mine across the following described public lands (see Appendix A):

Gila & Salt River Meridian, La Paz County, Arizona

- T. 4 N., R. 19 W.,
 - sec. 5, lot 4, $W\frac{1}{2}NW\frac{1}{4}$, and $SW\frac{1}{4}$;
 - sec. 6, lot 1 and $NE\frac{1}{4}NE\frac{1}{4}$;
 - sec. 8, $E\frac{1}{2}$ and $NE\frac{1}{4}NW\frac{1}{4}$;
 - sec. 9, $S\frac{1}{2}$.
- T. 5 N., R. 19 W.,
 - sec. 30, lot 4 and $SW\frac{1}{4}$;
 - sec. 31, lot 1 and $NE\frac{1}{4}$;
 - sec. 32, $NW\frac{1}{4}$, $NE\frac{1}{4}SW\frac{1}{4}$, and $W\frac{1}{2}SE\frac{1}{4}$.
- T. 5 N., R. 20 W.,
 - sec. 25, $SW\frac{1}{4}NE\frac{1}{4}$, $N\frac{1}{2}SW\frac{1}{4}$, and $SE\frac{1}{4}$;
 - sec. 26, $S\frac{1}{2}SE\frac{1}{4}$ and $SE\frac{1}{4}SW\frac{1}{4}$;
 - sec. 34, $NE\frac{1}{4}$;
 - sec. 35, $N\frac{1}{2}NW\frac{1}{4}$.

The area described contains approximately 41.21 acres.

Alternative A would grant a right-of-way over the existing Boyer Gap Road leading from the Town of Quartzsite to the Copper Chief Mine. This alternative would include a section of road realignment to provide additional access to Boyer Gap Road from State Highway 95. This modification would cross Tyson Wash north of the Town of Quartzsite at the La Paz County Transfer Station and proceed west to tie into the existing Boyer Gap Road. From time to time, a mineral material pit has been operated in Tyson Wash at the proposed crossing, and a crushing pad and stockpile pad exist immediately west of Tyson Wash. New disturbance would be minimized by using this route and would require approximately one-third (1/3rd) of a mile of new disturbance from the western edge of the existing mineral material pit west to Boyer Gap Road. Additional land disturbance would be minimal.

The road would be constructed or modified to 24 feet in width to allow 18-wheel trucks to pass each other safely. The road would be watered daily for dust control, unless weather eliminates the necessity. The existing roadway and proposed realignments cross mostly flat areas with some dips for washes and a few small hills. It is not anticipated that culverts or bridges would be used in the road construction or maintenance. The road may be surfaced in areas where existing soil is not sufficiently stable to maintain the traffic. Any surfacing material would come from the Copper Chief Mine, and would be crushed to a sufficient size to allow regular maintenance. There would be no need for sand or gravel from public land. All equipment used on the road would be stored on the patented mining claims owned by Sunset. At the present time road maintenance agreements with other individuals or entities are not needed.

The use of the existing road, as well as the realigned roadways would be permanent. The use would be heavy industrial to support a mine operation, including removal of mined material for sale. The road would be used year-round.

The roadway would be maintained on a continual (as needed) basis. Watering the road would occur daily, unless weather eliminates the necessity. The roadway would be signed warning the public of construction, grading and watering equipment. "Do Not Cross When Flooded" signs would be placed at the approach of any low area subject to flooding. Thirty (30) miles per hour (MPH) speed limit signs would be placed at the beginning of the road. Signs informing the public to stay out of the mining area would be placed along the property boundaries of Sunset Marble.

No structures, other than the signs mentioned above, would be erected along the right-of-way. Since the road has been in existence since the 1920's and because it is widely used by the public to access recreational areas, reclamation of the road at the end of the project is not anticipated.

2.1.1 MITIGATION MEASURES

The Arizona Department of Agriculture would be notified in writing at least 60 days prior to the destruction or removal of protected native plants.

The following standard mitigation measures would be implemented to prevent the introduction and spread of invasive non-native plants onto public lands:

- The holder would clean off-road equipment (power or high-pressure cleaning) of all mud, dirt, and plant parts prior to moving equipment onto public land authorized under this grant.
- Gravel and/or fill material to be placed in relatively weed-free areas would come from weed-free sources. Prior to obtaining gravel and/or fill material, the authorized officer would inspect the source for weeds and determine adequacy of site.
- The holder would identify a road maintenance program which would include monitoring for noxious weeds. If holder identifies any noxious weeds, the holder would notify the authorized officer immediately. A treatment program would be identified and the holder would be responsible for weed abatement.
- 2.78 acres (3,030 feet of new disturbance by 40 feet wide [the road would be 40 feet wide]) of desert tortoise habitat would need to be compensated for at a rate of \$192.00/acres for a total of \$533.76.
- A desert tortoise protection education program shall be presented to all employees, inspectors, supervisors, contractors, and subcontractors who carry out proposed activities at the projects site. The education program shall include discussions of the following:
 - The legal and sensitive status of the tortoise;
 - A brief discussion of tortoise life, history, and ecology;
 - Mitigation measures designed to reduce adverse effects to tortoises; and
 - Protocols to follow if a tortoise is encountered, including appropriate contact points.

In desert tortoise habitat, project-related vehicles shall not exceed 25 miles per hour on unpaved roads.

2.2 Alternative B

Alternative B was considered. This alternative would result in the approval of the existing Boyer Gap Road as described below:

Gila and Salt River Meridian, La Paz County, Arizona

T. 4 N., R. 19 W.,
 sec. 5, lot 4, W $\frac{1}{2}$ NW $\frac{1}{4}$, and SW $\frac{1}{4}$;
 sec. 6, lot 1 and NE $\frac{1}{4}$ NE $\frac{1}{4}$;
 sec. 8, E $\frac{1}{2}$ and NE $\frac{1}{4}$ NW $\frac{1}{4}$;
 sec. 9, SW $\frac{1}{4}$.

T. 5 N., R. 19 W.,
 sec. 30, lot 4 and SW $\frac{1}{4}$;

sec. 31, lot 1 and NE $\frac{1}{4}$;
sec. 32, SW $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, and W $\frac{1}{2}$ SE $\frac{1}{4}$.

T. 5 N., R. 20 W.,
sec. 25, SW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, and SE $\frac{1}{4}$;
sec. 26, S $\frac{1}{2}$ SE $\frac{1}{4}$ and SE $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 34, NE $\frac{1}{4}$;
sec. 35, N $\frac{1}{2}$ NW $\frac{1}{4}$.

The area described contains approximately 41.21 acres.

This alternative would result in no new road construction west of the La Paz County Transfer Station.

Under this alternative, Sunset would access the Copper Chief Mine via Boyer Gap Road. Access from Highway 95 would be through Tyson Street, within the Town of Quartzsite, 0.6 miles west to Desert Avenue, then north through the Greaswood Golf Course to Boyer Gap Road. This alternative is the least favorable due to the heavy trucks that would be using the residential roads.

2.3 No Action – Alternative C

This alternative would not provide Sunset legal access to the Copper Chief Mine through the use of public lands. Boyer Gap is an existing road that can be used for casual use, but it is not an authorized public road. Therefore, Sunset would not be able to use the road for commercial purposes.

2.4 Alternatives Considered but Dropped from Detail Study

2.4.1 Lead Well Road.

This Alternative was considered but dropped from further consideration due to the presence of wildlife. The Lead Well area is a wildlife water source. This alternative would have provided access from State Highway 95 to the Boyer Gap Road over the Lead Well Road. This would have required more land disturbance than the other alternatives at the proposed site crossing Tyson Wash, and would potentially cross sensitive wildlife habitat. However, this location would have shortened the overall travel from State Highway 95 to the mine site which would have produced less dust than using the existing Boyer Gap Road and crossing Tyson Wash at the La Paz County Transfer Station.

3.0 AFFECTED ENVIRONMENT

3.1 Introduction

A review of the existing environment shows that the following list of critical elements of the

human environment are not present or would not be affected by the proposed action or either alternative, therefore they will not be addressed in this EA: Areas of Critical Environmental Concern, Farm Lands (Prime or Unique), Native American Religious Concerns, Floodplain, Wild and Scenic Rivers, Visual Resources (form 8400-4), Wilderness, Fire Management, Wild & Free Roaming Horses, Recreation Services, and Special Recreation Management Areas.

3.2 General Setting

The proposed right-of-way is located within La Paz County, in the southwestern portion of the State of Arizona, north and northwest of the Town of Quartzsite. The topography elevations of the project area range from 680 to 851 feet above mean sea level (msl). The project area is located on the La Posa Plain which is flanked to the west by the Dome Rock Mountains. The Copper Chief Mine claims are located near Boyer Gap in the northern portion of the Dome Rock Mountains. Tyson Wash, an intermittent wash, is located to the east of Boyer Gap Road and flows northwest. The Colorado River is approximately 15 miles west of the project area.

The overall climate is warm, extremely arid, and summer temperatures frequently exceed 100°Fahrenheit (F). Precipitation rates for the area average less than 4 inches annually with 60 to 70 percent of the total precipitation occurring in the late fall or winter.

3.3 Cultural Resources

Cultural resources are defined by the National Historic Preservation Act as prehistoric and historic sites, structures, districts, or any other physical evidence of human activity considered important to a culture, a subculture, or a community for scientific, traditional, religious, or any other reason.

A Class III Cultural Resources Survey was conducted by Northland Research, Inc. on January 31-February 1, 2005, along the proposed right-of-way under Alternative A. Within that easement one historic site (AZ R:7:115(ASM)), 11 historic isolated artifact occurrences, and two prehistoric isolated artifacts were recorded. The historic site (AZ R:7:115(ASM)) consists of two mining adits/trenches excavated horizontally to the south face of a schist outcrop. Northland recommends this site as not eligible to the National Register (Dosh 2005). In addition, one prehistoric site (AZ R:8:115 (ASM)) was previously recorded within this proposed right-of-way. It had been previously recorded as a prehistoric artifact scatter in 1977. After a thorough search of the area, Northland was unable to relocate this site. The site has likely been obliterated by road improvements since its original recording, and is therefore considered ineligible to the National Register.

One additional site (AZ R:8:116 (ASM)) is recorded within the immediate vicinity of easements described under Alternative B. Site AZ R:8:116 (ASM) is a prehistoric site with several cleared areas and some trail segments, and is recommended as eligible to the National Register.

3.4 Air Quality

The Clean Air Act (CAA), as amended, establishes National Ambient Air Quality Standards for

the control of criteria air pollutants to protect human health and the environment, and to prevent adverse affects to national air resources. The Arizona Department of Environmental Quality has adopted these Federal standards as the Arizona Ambient Air Quality Standards and is the regulating and enforcing agency for Arizona air quality standards.

In arid regions, such as southern Arizona, particulate matter 10 microns (PM10) and smaller occurs at higher levels due to low soil moisture, low humidity, and wind resulting in higher dust dispersion rates. No portion of southern La Paz County falls within a nonattainment area. The site proposed for the right-of-way is not located within or adjacent to any nonattainment areas for National Ambient Air Quality Standards (Code of Federal Regulations 2004).

3.5 Environmental Justice

Executive Order 12898 - *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs Federal agencies to address disproportionately high and adverse human health or environmental effects of its programs and policies, and activities on minority and low-income communities. The Council on Environmental Quality (CEQ) provides suggestions and guidance for addressing Environmental Justice issues under NEPA (CEQ 1997a).

Population levels and their associated income groups fluctuate in La Paz and Yuma Counties on a seasonal basis. The U.S. Census Bureau noted between 2000 and 2003, Arizona's population increased by 8.8%, the population of La Paz County decreased by 1%. In 2000, Quartzsite reported a population of 3,354. The majority of this population (95%) was reported as white. La Paz County reports that 55.7% of the population was retired or "not in labor force."

3.6 Socioeconomic

The socioeconomic setting involves the basic attributes and resources associated with the activities of humans, particularly population characteristics, economic assets, and activity. Economic activity typically encompasses employment, personal income, and industrial trends and growth. Impacts on population and/or economic activity can also influence other components, such as housing availability and public services provision.

3.7 Wildlife and Vegetation

Vegetation

Vegetation in the project area is described as Lower Colorado River Valley Sonoran Desertscrub, Creosotebush-Bursage Series, *Larrea tridentata*-*Ambrosia dumosa* Association. The predominant perennial species at lower elevations are Creosotebush and white bursage. At higher elevations, other species increase in abundance, including ocotillo (*Fouquieria splendens*) and mixed cacti including saguaro (*Carnegie gigantea*), teddy-bear cholla (*Opuntia bigelovii*), buckhorn cholla (*O. acanthocarpa*), pincushion (*Mammillaria* sp.), beavertail (*O. basilaris*), diamond cholla (*O. echinocarpa*), christmas cholla (*O. leptocaulis*), hedgehog (*Echinocereus* sp.), and barrel cactus (*Ferocactus acanthodes*). Saguaros) are uncommon. Vegetation along

the washes is described as Mixed Scrub Series, *Cercidium floridum*-*Olneya tesota*-*Dalea spinosa* Association. Tributaries to Tyson Wash support predominantly blue palo verde, ironwood, foothill palo verde (*C. microphyllum*), and catclaw acacia (*Acacia greggii*) with an understory of thornbush (*Lycium* sp.) and desert lavender (*Hyptis emoryi*) and ground cover consisting of tobosa (*Hilaria rigida*) and a few other grasses (*Aristida* sp., *Tridens pulchellus*). Tyson Wash near Quartzsite supports predominantly smoketree (*Dalea spinosa*) and sweetbush (*Bebbia juncea*), with occasional desert willow (*Chilopsis linearis*). Floodplain terraces along Tyson Wash support an open velvet mesquite (*Prosopis velutina*) and catclaw bosque.

Wildlife

Wildlife in the project area is typical of the Creosotebush-Bursage Series and Mixed Scrub Series plant communities. Desert mule deer (*Odocoileus hemionus crookii*) range from the mountain slopes onto the bajada and valley plain. Desert bighorn sheep (*Ovis canadensis nelsoni*) are largely restricted to steep and rugged terrain in the Dome Rock Mountains. The sheep herd in this range is conservatively estimated at 16 animals (8 rams, 4 ewes, and 4 lambs). This herd is seen regularly in the Marquita Pass area south of the project site, especially in summer when they frequent a developed watering hole. Movement of sheep occurs predominantly between the Dome Rock Mountains and the Trigo and Kofa Mountains south of I-10, but also occurs between the Dome Rocks and the Plomosa Mountains east of State Route 95. The project area is located at the north end of the range of this population in the Dome Rock Mountains. The project vicinity supports no permanent or intermittent waters and provides limited lambing habitat. Nevertheless, sheep occasionally move through Boyer Gap and are seen in areas west of the Gap. Other larger wildlife species that occur throughout the area are coyote (*Canis latrans*) and kit fox (*Vulpes macrotis*). Smaller mammals include kangaroo rat (*Dipodomys* spp.), pocket mice (*Perognathus* spp.), round-tailed ground squirrel (*Spermophilus tereticaudus*), and antelope ground squirrel (*Ammospermophilus* sp.). Numerous mine shafts and adits in the Dome Rock Mountains provide roosting habitat for various species of bats. Reptiles observed or expected to occur on the desert plain and bajada include the sidewinder rattlesnake (*Crotalus cerastes*), western whiptail (*Cnemidophorus tigris*), and desert iguana (*Dipsosaurus dorsalis*). Chuckwalla (*Sauromalus obesus*) and Sonoran desert tortoise (*Gopherus agassizii*) occur in rocky areas in the foothills and mountains. The Dome Rock Mountains have been classified as category 3 desert tortoise habitat by the BLM. Avifauna is generally poor and habitat is concentrated along the washes with denser vegetation. Common species include black-throated sparrow (*Aimophila bilineata*), Say's phoebe (*Sayornis saya*), verdin (*Auriparus flaviceps*), Gila woodpecker (*Melanerpes uropygialis*), and ash-throated flycatcher (*Myarchis cinerascens*).

3.8 Threatened, Endangered, or Special Status Species

There is no habitat in the project area for any threatened, endangered, proposed, or candidate species. No proposed or designated critical habitat occurs in or near the project area.

Some other special status species, either United States Fish and Wildlife Service (USFWS) Species of Concern, BLM sensitive species, or Arizona Game and Fish Department Wildlife of Special Concern, occur or have the potential to occur in the project area. Chuckwallas inhabit

the rocky foothills of the mountains. A loggerhead shrike (*Lanius ludovicianus*) was observed west of Boyer Gap. Shrikes are expected to occur throughout the area and typically nest along larger ephemeral washes. Bats were observed at mine adits and shafts within one mile of Boyer Gap Road and the privately-held mining claims. Species that may use these features as roost sites include Pale Townsend's big-eared bat (*Corynorhinus townsendii pallescens*), greater western mastiff bat (*Eumops perotis californicus*), cave myotis (*Myotis velifer*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), and California leaf-nosed bat (*Macrotus californicus*). Banded Gila monster (*Heloderma suspectum cinctus*), desert rosy boa (*Lichanura trivirgata*), and Sonoran desert tortoise potentially occur on the upper bajada, foothills, and slopes of the mountains. The Dome Rock Mountains in the project area have been designated as category 3 habitat for the Sonoran desert tortoise.

Plant species protected under the Arizona Native Plant Law include desert trees and cacti. Protected plant species observed in the project area are saguaro (*Carnegie gigantea*), teddy-bear cholla (*Opuntia bigelovii*), buckhorn cholla (*O. acanthocarpa*), pincushion (*Mammillaria* sp.), beavertail (*O. basilaris*), diamond cholla (*O. echinocarpa*), christmas cholla (*O. leptocaulis*), hedgehog (*Echinocereus* sp.), barrel cactus (*Ferocactus acanthodes*), ocotillo (*Fouquieria splendens*), foothill palo verde (*Cercidium microphyllum*), blue palo verde (*C. floridum*), ironwood (*Olneya tesota*), velvet mesquite (*Prosopis velutina*), smoketree (*Dalea spinosa*), and desert willow (*Chilopsis linearis*). All cacti are classified as Salvage Restricted. The desert trees are classified as Salvage Assessed. Ironwood and velvet mesquite are also classified as Harvest Restricted. No Highly Safeguarded plant species occur in the project area.

3.9 Hazardous or Solid Wastes

Hazardous wastes are considered waste which poses a substantial present or potential hazard to human health or living organisms. Solid waste is defined as any garbage, refuse, or sludge from waste treatment, water treatment, or other discarded material resulting from industrial, commercial, or community activities. No existing hazardous or solid wastes are currently known in the area of the Proposed Action.

3.10 Water Quality (Surface and Ground)

The control or structural change of any stream or body of water would not be modified. There are no groundwater wells located within the proposed action area and no wells are planned as part of the proposed action. A well is planned for the mine site.

3.11 Wetlands/Riparian Zones

The wash is considered to be a xeroriparian zone, associated with intermittent water supplies. This wash only flows during periods of high rainfall.

3.12 Land Use

Land use in the area of the proposed action is currently managed by the BLM. The area is in the La Posa Planning area, where camping is restricted to long-term visitor areas (LTVAs) and

designated 14-day camping areas. The land is managed for multiple uses, i.e. recreation, wildlife habitat, grazing, minerals, etc. Typical use in the area of the proposed action is limited to off-road vehicles on existing roads, trails, and in desert washes.

3.13 Noise

The Noise Control Act of 1972 was enacted to promote an environment free from noise that jeopardizes public health and welfare. Noise level would consist of normal mining activity, including blasting and crushing at the mine site. However, the site is approximately 8 miles from any existing residence or other structures.

3.14 Energy Policy

The proposed action contains no features related to energy development, production, supply or distribution.

3.15 Invasive and Non-Native Species

The BLM listing of invasive non-native plant species of interest was obtained and reviewed. None of the invasive non-native plant species on this list were observed in the project area.

3.16 Soils

The onsite soils are capable of holding the road bed and handling the drainage without difficulty. The road may be surfaced in areas where existing soil is not sufficiently stable to maintain the traffic.

3.17 Rangeland Health

Grazing

Alternative A would be located within the Martinez Allotment. Grazing use on this allotment is authorized through the Special Ephemeral Rule. As an ephemeral allotment, grazing use may be applied for when forage is available. No grazing has been applied for on this allotment for 20 years.

Standards for Rangeland Health

A Rangeland Health Assessment was completed on the Martinez Allotment in 2003. The assessment found that the area is meeting Arizona Standards for Rangeland Health. The sandier soils north of the proposed project have been infested by *Brassica tournefortii*, but livestock use, which has been absent, is not a contributing factor in this infestation.

4.0 ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION AND ALTERNATIVES

4.1 Introduction

The following resources have been analyzed and are either not present or would not be impacted by the Proposed Action or the Alternative Actions, therefore they will not be addressed in this EA: Areas of Critical Environmental Concern, Farm Lands (Prime or Unique), Native American Religious Concerns, Floodplain, Wild and Scenic Rivers, Visual Resources (form 8400-4), Wilderness, Fire Management, Wild & Free Roaming Horses, Recreation Services, and Special Recreation Management Areas.

4.2 Cultural Resources

Alternative A

Site AZ R:7:115(ASM) might be impacted or destroyed by the creation of a new road across Tyson Wash. This site is recommended as ineligible to the National Register of Historic Places. The site has been thoroughly documented; no additional mitigation or protection measures are recommended.

Alternative B

Under this alternative, Sunset would continue to use existing roads, so there would be no impacts to any of the archaeological sites identified in the project area. Site AZ R:8:116 (ASM), which is recommended as eligible to the National Register, would be completely avoided by project activities.

Alternative C

Under Alternative C there would be no impact to cultural resources.

4.3 Air Quality

Alternative A

During the construction of the road modification, some dust would become airborne as a result. This impact would be temporary. Air quality would be maintained by use of water to control dust.

Alternative B

This alternative would use existing roads in their existing conditions for the hauling of mined materials. There would be no impacts from construction of the road modifications.

Alternative C

This alternative would have no impact to air quality.

4.4 Environmental Justice

There would be no impacts to environmental justice as a result of Alternative A, B, or C.

4.5 Socioeconomic

Alternative A

The proposed action would provide 8 to 10 new jobs in the operation of the mine. It is expected that the employees would reside in or near the Town of Quartzsite. Trucks going through Quartzsite would potentially increase the sale of fuel, food and lodging. The proposed action would have a positive effect on the socioeconomic setting of the area.

Alternative B

This alternative would have no impact or effect on the socioeconomic setting of the area.

Alternative C

This alternative would have no impact or effect on the socioeconomic setting of the area.

4.6 Wildlife and Vegetation

Alternative A - Vegetation

The proposed action would result in the widening of the existing Boyer Gap Road at several locations near the quarry site. This would result in the removal of less than one acre of Creosotebush-Bursage Series vegetation in these areas. These localized activities would not affect any Mixed Scrub Series vegetation along washes. Construction of a new crossing of Tyson Wash would result in the removal of up to 2 acres of Mixed Scrub Series wash vegetation, consisting predominantly of smoketree, sweetbush, and velvet mesquite.

Alternative B – Vegetation

This alternative would use existing roads in their existing conditions for the hauling of mined materials. Therefore, this alternative would have no impact on vegetation.

Alternative C - Vegetation

This alternative would have no impact on vegetation.

Alternative A - Wildlife

The proposed action would result in removal of some wildlife habitat, increased mortality from roadkill, and disturbance from noise. This alternative would result in the removal of less than one acre of upland and up to two acres of wash habitat. Effects on wildlife would be limited due

to the sparse nature of the affected uplands areas and their direct vicinity to the existing Boyer Gap Road. The proposed activities in these areas would remove a small amount of habitat used primarily by small mammals and reptiles. Noise from trucks and mining activities may result in the abandonment of two roost sites for bats in the area. Bat species that may use these features include the Pale Townsend's big-eared bat (*Corynorhinus townsendii pallescens*), greater western mastiff bat (*Eumops perotis californicus*), cave myotis (*Myotis velifer*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), and California leaf-nosed bat (*Macrotus californicus*). The reach of Tyson Wash affected by the construction of a new crossing provides habitat primarily for smaller wildlife species such as birds, reptiles, and small to medium-sized mammals. The value of the habitat at this location is limited by its proximity to SR 95, the Town of Quartzsite, and existing disturbance from an adjacent materials borrow pit.

The proposed action would result in a substantial increase in traffic on Boyer Gap Road from haul trucks. This would result in an increase in vehicle-wildlife collisions or roadkill and would affect primarily diurnally-active species such as coyotes, jackrabbits, cottontails, snakes, and lizards. Truck traffic on this road would also result in additional noise disturbance that would reduce the suitability of adjacent areas for nesting birds. Activity at and near the quarry site, including the operation of haul trucks along the upper portion of Boyer Gap Road would reduce available habitat for desert bighorn sheep in this portion of the Dome Rock Mountains and may affect their movement patterns. The cumulative effect of increasing winter visitation by retirees in the area; increasing recreational use, particularly off-highway and off-road vehicle use; and development and operation of this quarry may eliminate the northern portion of the Dome Rock Mountains as habitat for bighorn sheep. It may also impede the movement of sheep and desert mule deer through the Boyer Gap area.

Alternative B - Wildlife

This alternative would use existing roads in their existing conditions for the hauling of mined materials. This alternative would result in increased mortality from roadkill, and disturbance from noise. Impacts from increased road traffic and noise disturbance would be similar to Alternative A.

Alternative C - Wildlife

This alternative would have no impact on wildlife.

4.7 Threatened, Endangered Species, and Special Status Species

Alternative A

The proposed action would have no effect on threatened, endangered, proposed, or candidate species, or proposed or designated critical habitat. Mine-related truck traffic on Boyer Gap Road may result in increased mortality of other special status species, including chuckwalla, banded Gila monster, desert rosy boa, and Sonoran desert tortoise. Noise from trucks and mining activities may result in the abandonment of two roost sites for bats in the area and may preclude nesting by loggerhead shrikes in the direct project vicinity.

This alternative would remove less than one acre of upland area and could remove some small Salvage Restricted cacti. This alternative would remove up to two acres of wash habitat along Tyson Wash and would result in the removal of Salvage Assessed and Harvest Restricted desert trees, primarily smoke tree and velvet mesquite and to a lesser extent desert willow and blue palo verde. No Highly Safeguarded plant species would be affected under this alternative.

Alternative B

Alternative B would have no effect on threatened, endangered, proposed, or candidate species, or proposed or designated critical habitat. Mine-related truck traffic on Boyer Gap Road may result in increased mortality of other special status species, including chuckwalla, banded Gila monster, desert rosy boa, and Sonoran desert tortoise. Noise from trucks and mining activities may result in the abandonment of two roost sites for bats in the area and may preclude nesting by loggerhead shrikes in the direct project vicinity. This alternative would result in no impacts to any protected native plants.

Alternative C

This alternative would have no effect on threatened, endangered, proposed, or candidate species, or proposed or designated critical habitat. This alternative would result in no impacts to any protected native plants.

4.8 Hazardous or Solid Wastes

Alternative A

No existing hazardous or solid wastes are currently known or observed in the area of the proposed action. There would be no adverse impacts from hazardous or solid wastes by implementing Alternative A. During the construction of the right-of-way, a porta-potty would be provided and maintained weekly. A trailer would be provided for collection of solid waste to be hauled to the county landfill. The hazardous materials policy requires lined fuel tanks to contain any accidental spills. Health and Safety standards would be followed according to the Mine Safety and Health Administration (MSHA).

Alternative B

This alternative would use existing roads in their existing conditions for the hauling of mined materials. Therefore, this alternative would have no impact on hazardous or solid wastes

Alternative C

This alternative would have no impact on hazardous or solid wastes.

4.9 Water Quality (Surface and Ground)

Surface Water – Alternative A

Alternative A would include crossing an intermittent wash, Tyson Wash. This wash flows towards the northwest. The road crossing Tyson Wash near the La Paz County Transfer Station is the site of an Arizona Department of Transportation (ADOT) material pit that has been used from time to time but is presently inactive. This route would require disturbance of very little additional land, approximately one-third of a mile, on the west side of Tyson Wash. The impacts to surface water would be minimal to none. The control or structural change of any stream or body of water would not be modified.

Groundwater - Alternative A

It is anticipated that the proposed activities would result in no adverse impacts to groundwater in the area due to low precipitation, high evapotranspiration, and depth to groundwater.

Alternative B

This alternative would use existing roads in their existing conditions for the hauling of mined materials. Therefore, this alternative would have no impact on water quality.

Alternative C

This alternative would have no impact on water quality.

4.10 Wetlands/Riparian Zones

Alternative A

There are no wetlands on or near either alternative. Both alternatives cross a desert wash, Tyson Wash. Alternative A would improve the existing road across the wash. Alternative B is already improved across the wash.

This alternative would result in up to two acres of impact to Tyson Wash, an ephemeral drainage, and associated xeroriparian vegetation consisting predominantly of smoketree, sweetbush, velvet mesquite, and catclaw acacia. Maintenance (grading) of the Boyer Gap Road would not result in any additional impacts to xeroriparian vegetation.

Alternative B

This alternative would result in no impacts to xeroriparian vegetation.

Alternative C

This alternative would result in no impacts to xeroriparian vegetation.

4.11 Land Use

Alternative A

Land use in the area of the proposed action would not be impacted by implementing Alternative A.

Alternative B

This alternative would have no impact on land use in the vicinity.

Alternative C

This alternative would have no impact on land use in the vicinity.

4.12 Noise

Alternative A

The noise impact over the requested use area would be haul trucks and road maintenance equipment, which would be minimal.

Alternative B

The noise impact over the area would be from the increased numbers of haul trucks over Tyson Street to Boyer Gap Road.

Alternative C

This alternative would have no impact on noise.

4.13 Energy Policy

Alternatives A, B, or C would have no impacts on any energy related features.

4.14 Invasive and Non-Native Species

Alternative A

Materials hauling could introduce non-native invasive plant species to the project area. Mined materials would be transported to communities in Arizona and southern California, including communities along the Lower Colorado River. Seeds or propagules could be transported from these areas on the tires and undercarriages of trucks. Plant species with the highest potential for introduction are those adapted to arid desert climates, such as Mediterranean-grass (*Schismus barbatus*), puncture-vine (*Tribulus terrestris*), Sahara mustard (*Brassica tournefortii*), and buffel-grass (*Pennisetum ciliare*).

Alternative B

The effects of this alternative would be the same as described under Alternative A.

Alternative C

This alternative would have no impacts to invasive and non-native species.

4.15 Soils

Alternative A, B, or C would have no adverse impacts to soils.

4.16 Rangeland Health

Grazing

Alternatives A and B

There would be minimal to no impact to livestock grazing should either alternative be implemented. Should livestock use be approved, livestock-vehicle incidents could arise along the routes. All places where a fence is crossed should have a suitable cattle guard installed to restrict livestock access to either the residential area around Alternative B or from State Route 95 on Alternative A.

Alternative C

This alternative would not impact grazing.

Standards for Rangeland Health

Alternatives A and B

If proper road design and construction are followed, neither alternative would impact the Standards for Rangeland Health. The design should include water bars, culverts, and other structures where necessary.

Alternative C

This alternative would not impact Standards for Rangeland Health.

4.17 Aesthetics

Alternative A

The surface of the land would be minimally disturbed. The existing roadway would be widened in certain area. If the requested modifications to the roadway are approved, the impact on

vegetation would be minimal.

Alternative B

This alternative would use existing roads in their existing conditions for the hauling of mined materials. Therefore, this alternative would have no impact on aesthetics.

Alternative C

This alternative would have no impact on aesthetics.

4.18 Cumulative Effects

Cumulative effects are defined by the National Environmental Policy Act (NEPA) as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-federal) or person undertakes such actions (40 CFR §1508.7).

Alternative A

The Boyer Gap Road has been in existence since the 1920's and is widely used by the public to access recreational areas. The realignment and modification of the La Paz County Transfer Station road would reduce both the commercial and recreational traffic through residential areas along Tyson Street and Desert Avenue. No adverse cumulative impacts to environmental resources are expected to occur in association with implementing the Proposed Action.

Alternative B

Traffic would potentially increase through the residential areas along Tyson Street and Desert Avenue. No adverse cumulative impacts to environmental resources are expected to occur in association with implementing this alternative.

Alternative C

There would be no cumulative impacts as a result of this alternative.

CONSULTATION AND COORDINATION

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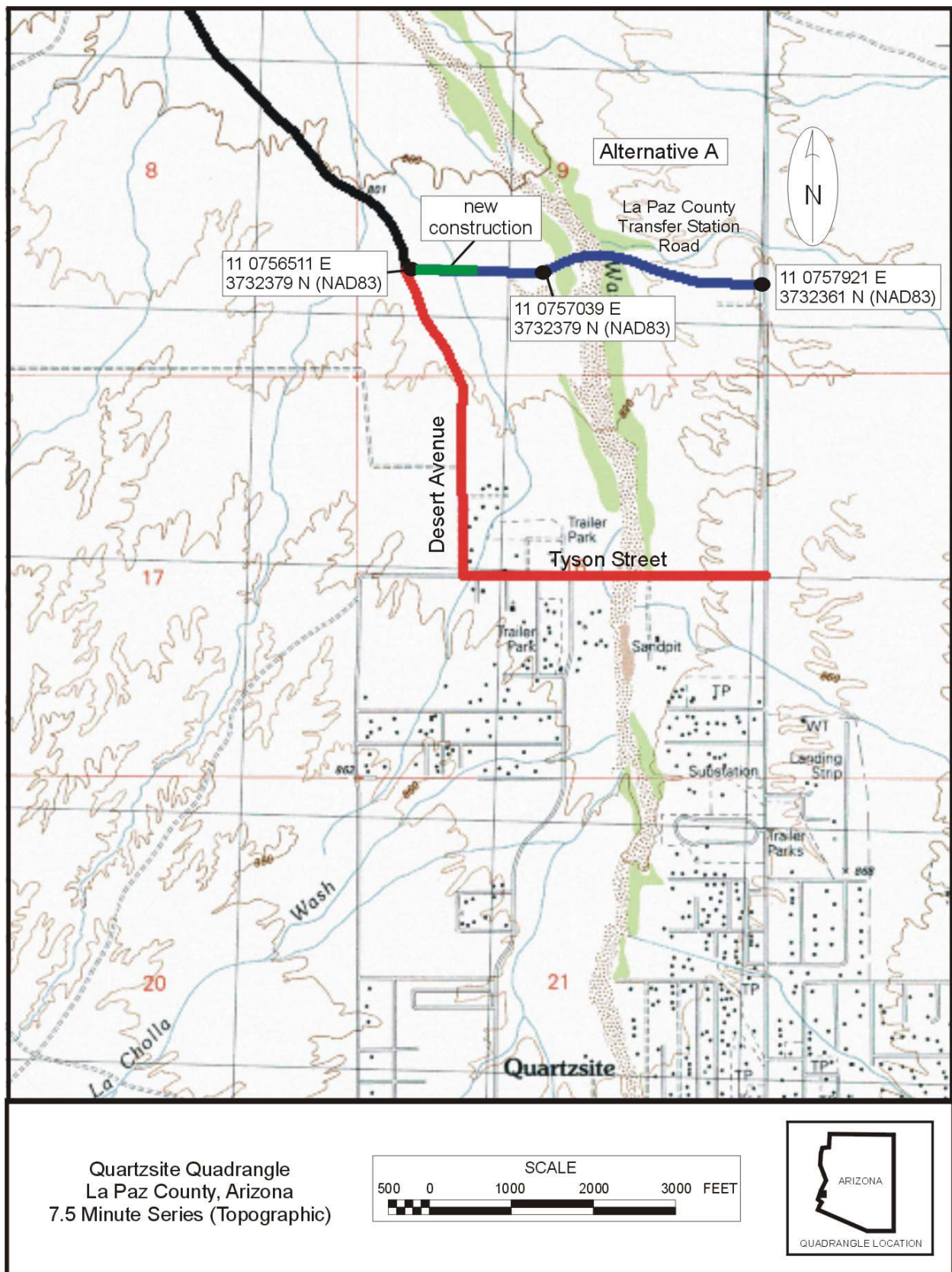
Leo Crowley, Manager

REFERENCES

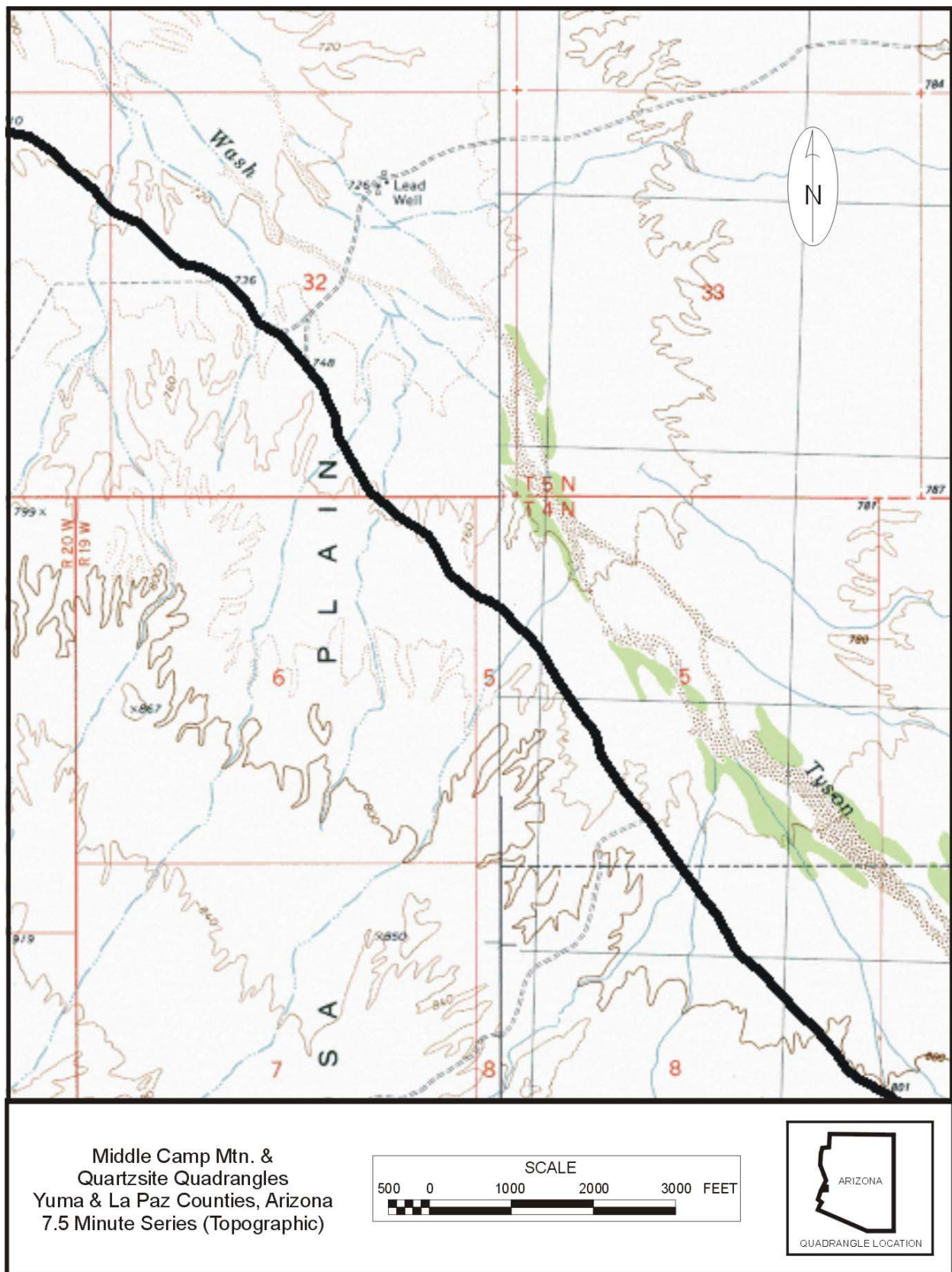
Dosh, Steven G. (2005). Cultural Resources Survey, Copper Chief Mine Easements, La Paz County, Arizona. Northland Research, Inc. Flagstaff, Arizona.

APPENDIX A

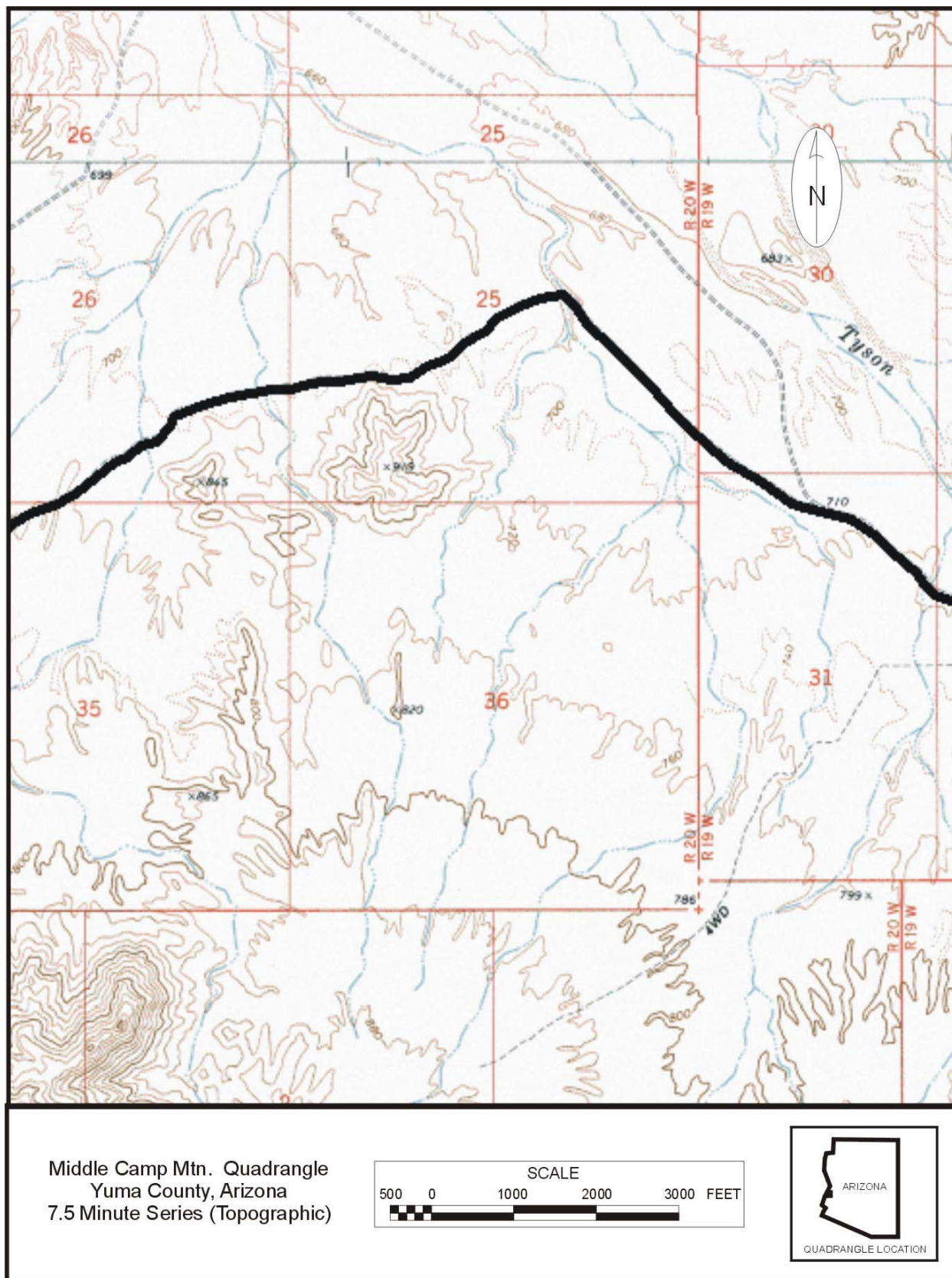
Maps



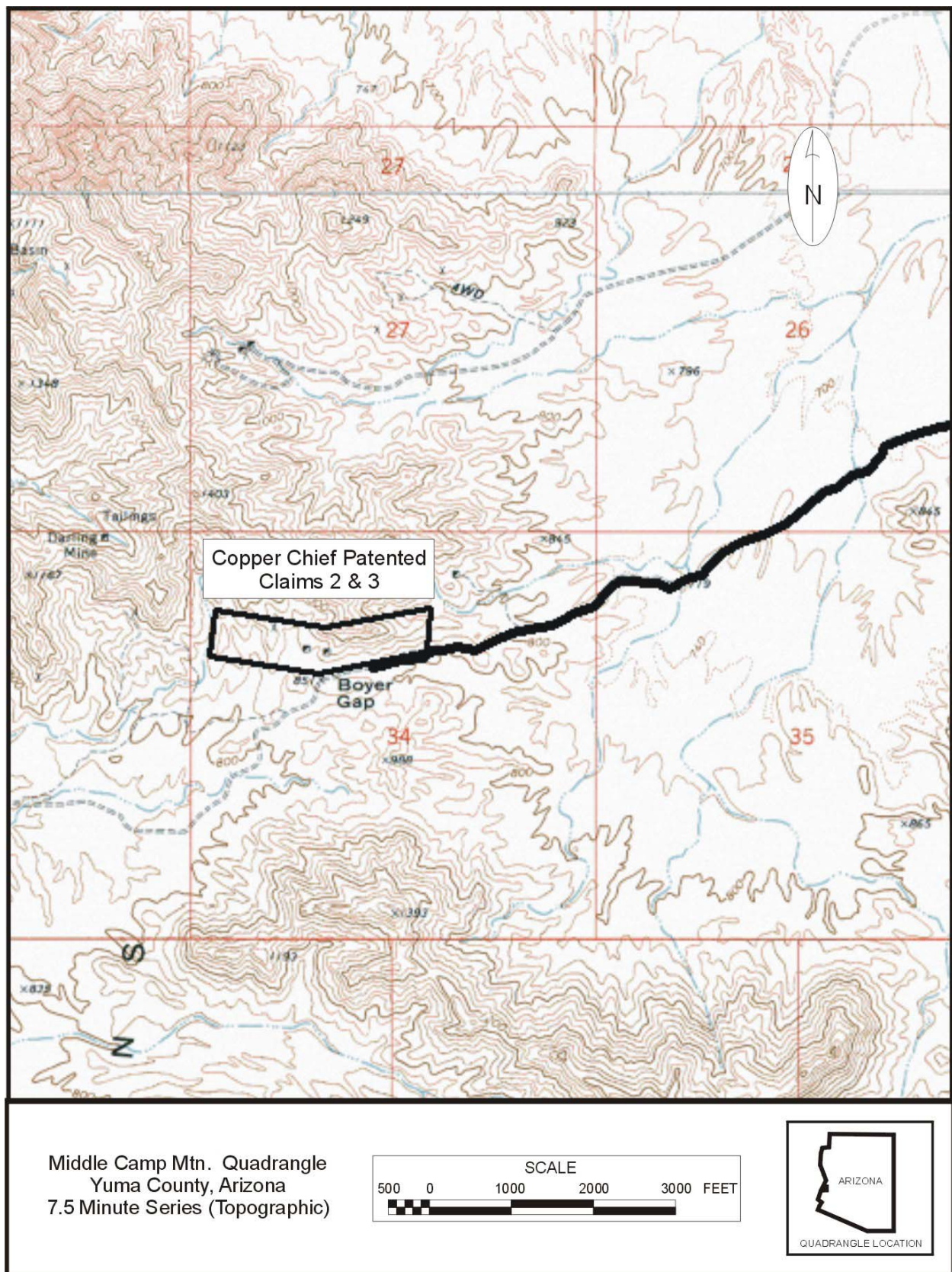
Map 1. Project location.



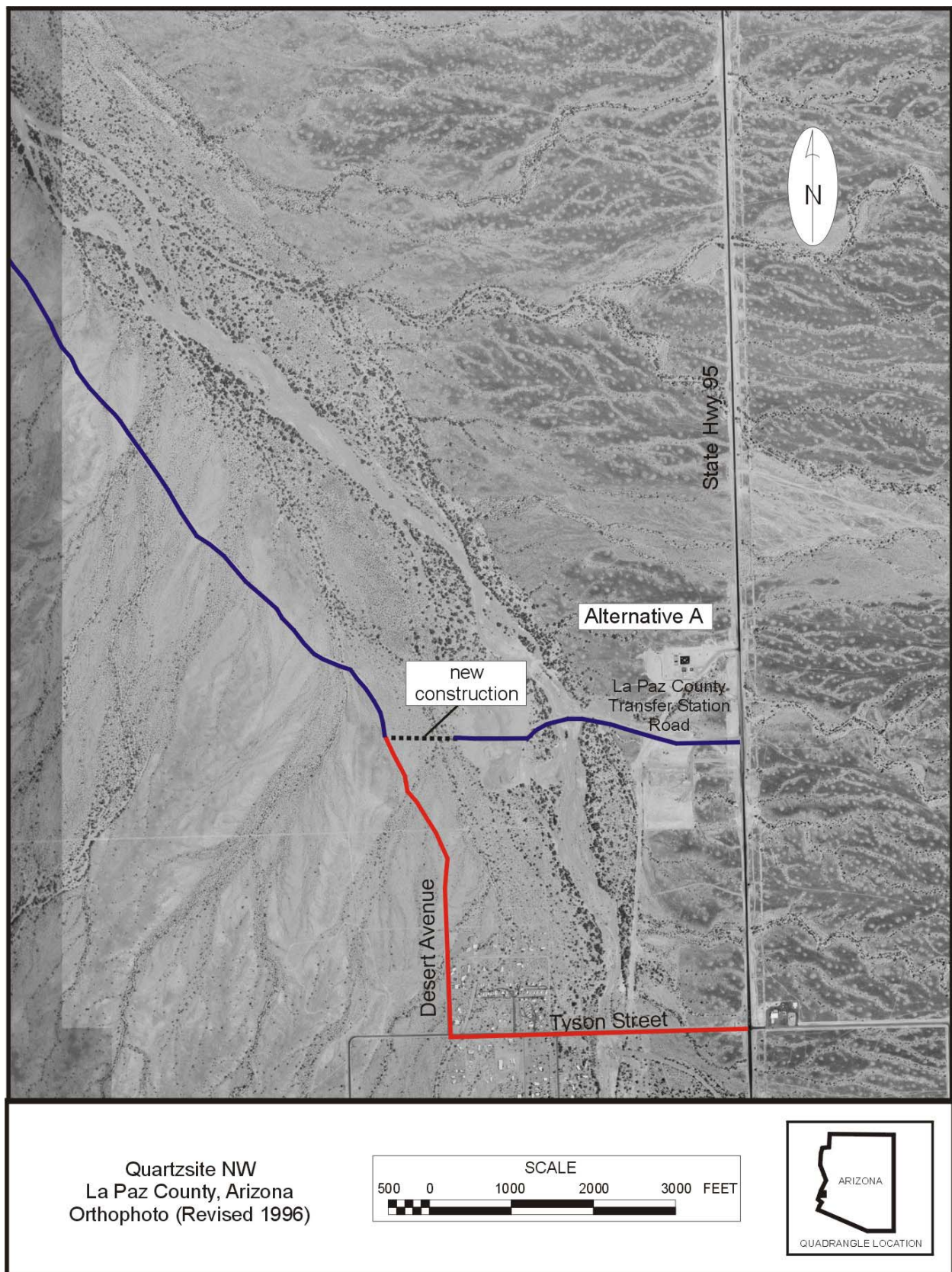
Map 2. Boyer Gap Road.



Map 3. Boyer Gap Road



Map 4. Boyer Gap Road and location of the Copper Chief claims.



Map 5. Aerial photo showing location of proposed new road construction.